PP 1912 ffa

3d MONTHLY

THE OPTICAL LANTERN & CINEMATOGRAPH

Edited by THEODORE BROWN

Incorporating "The Optical Magic Lantern Journal & Photographic Enlarger," "The Lantern World" and "Cinematograph Chronicle."

No. 7.—Vol. 1. MAY, 1905. 3d. Monthly. By Post, 4d.

Animatograph Depot.

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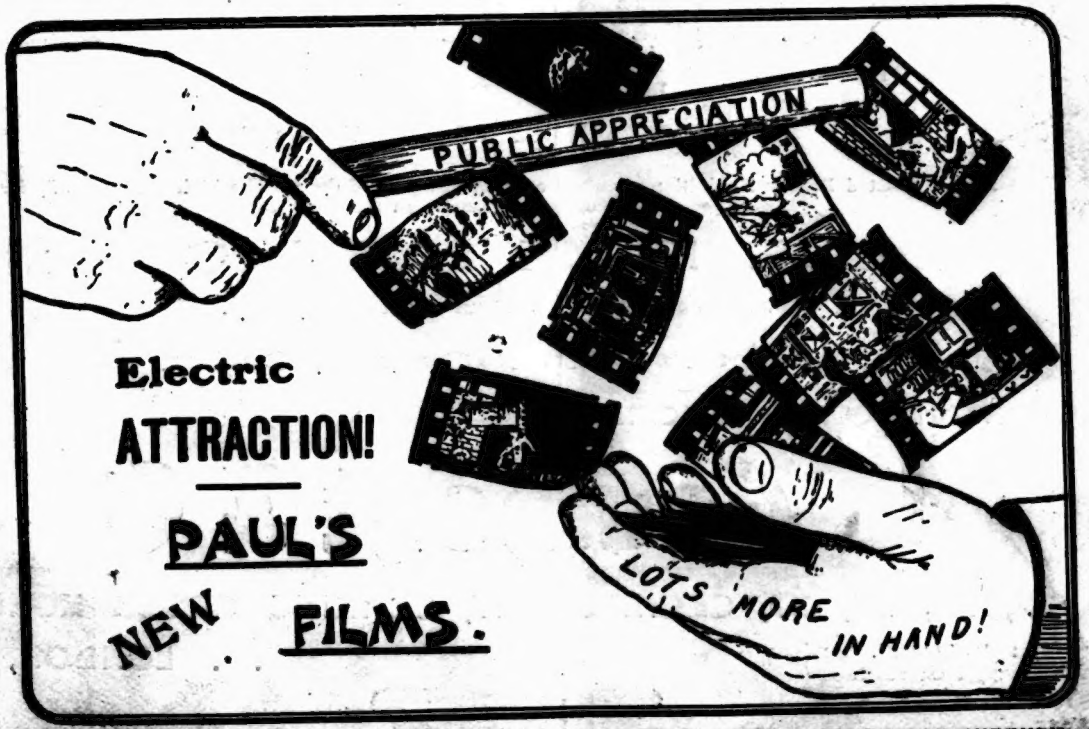

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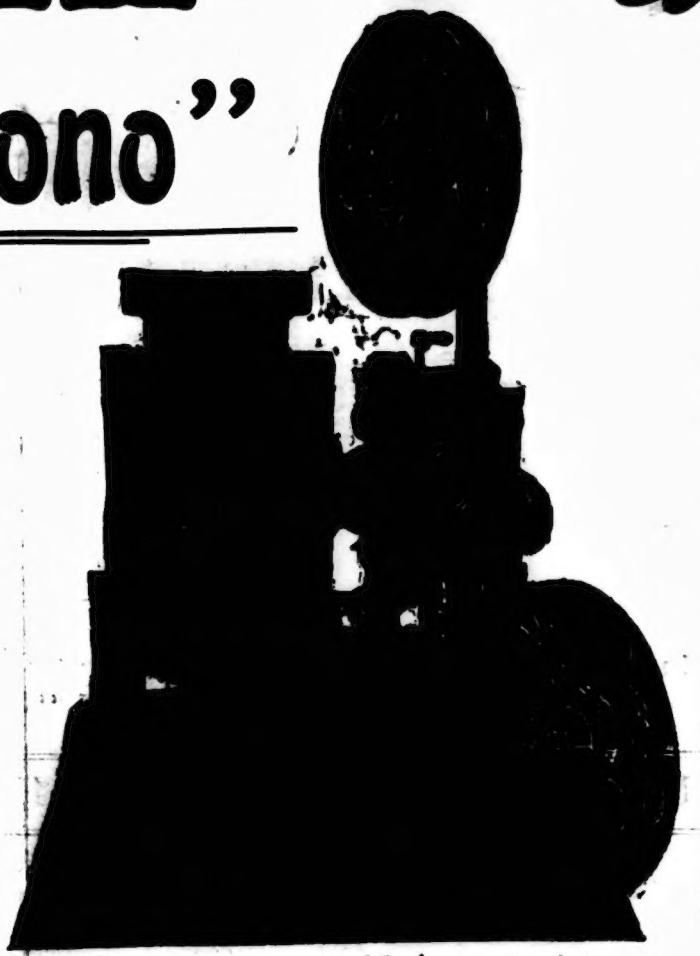

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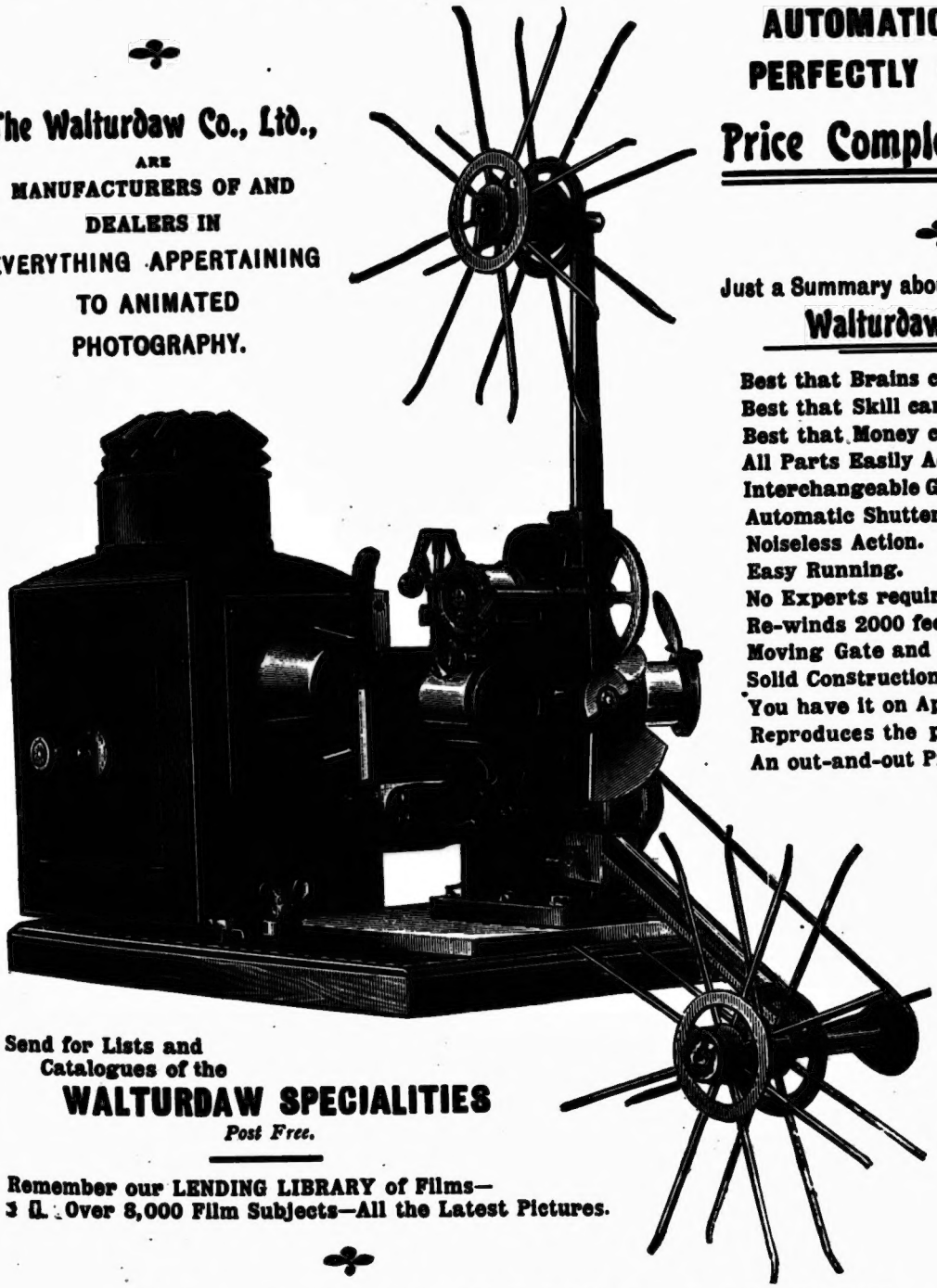

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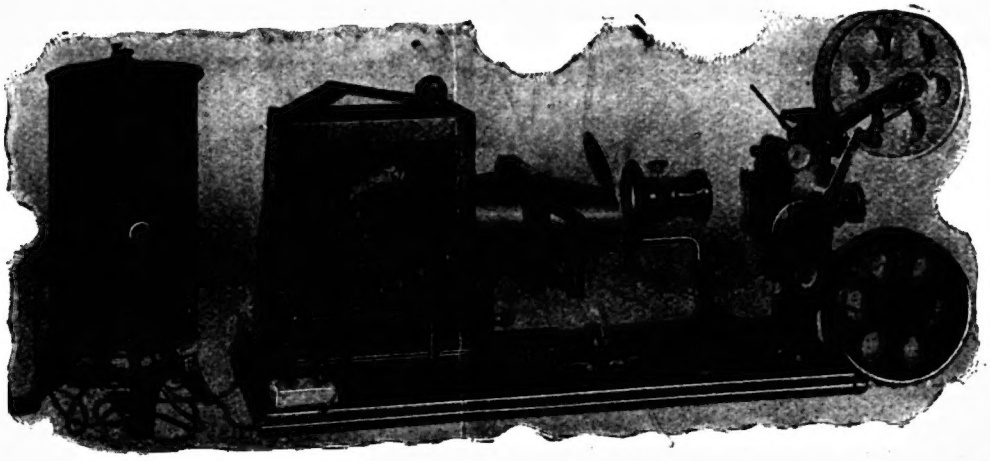

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MOST gratifying are the letters we receive from subscribers and friends, and one just to hand from Mr. J. H. Hammerton, the Secretary of the Gordon College Amateur Photographic Association at Geelong, Australia, whose motto is "We grasp the shadow," shows how our friends far away appreciate the magazine devoted to their particular hobby which comes from the home country. Mr. Hammerton writes: "We brought your journal before our last meeting. We have a large membership, and the members will assist you if in their power to popularise the journal." Mr. Hammerton encloses the syllabus for the summer, and we notice many interesting items are in it. Competitions are held at the monthly meetings, and we find such titles as Summer, Still Life, Sheep, Landscape, Architecture, and Story without Words, etc. Some excellent lectures have also been arranged, and it is curious to find such evenings as "Lantern Lecture supplied by Burroughs, Wellcome & Co.," "Demonstration by Kodak," "Tabloid Evening," etc. We should like to hear from more friends connected with such enterprising associations.

SEVERAL of our contemporaries have lately taken to heart the increasing success of the trick film, and deplore their position in popularity over what they are pleased to term the "straightforward cinematograph picture." Our friend, the *British Journal of Photography*, thus deplores their existence:—"Straightforward cinematograph pictures, unless they record some event which is the topic of the moment, bid fair to be driven from the field by the trick film, on which all the art and paraphernalia of a stage manager are now expended. At London's greatest palace of amusement, the Coliseum, a trick film, obtained by one or the other of these simple methods, is an evident source of delight and astonishment to the audience, seeking entertainment undiluted with instruction, and we must confess our admiration of the cleverness with which a whole series of incidents are pictured so as to appeal to one's senses of the sensational and the ludicrous, without a single word being spoken." After an exhaustive description of some of the recent trick films, the writer dwells on the film showing the assassination of the Grand Duke Sergius, which he calls "history second-hand," and thus winds up his doubtful panegyric: "One cannot call such pictures frauds, for surely the most ignorant do not believe them to be actual photographs of the incident."

IT is a delicate matter for us to vindicate the character of trick films, and to compare their educational usefulness with such "elevators" as Professor Duncan's animal, plant, and insect series, and yet we feel justified in holding a brief on their behalf. Take the identical film of the assassination—anyone who has seen it must have been struck with its semblance to realism. The costumes and scenery were true to fact; the actors rehearsed unceasingly to delineate their characters perfectly; the carriage was specially built, and the minor details carefully planned; in fact, the whole of the scene spoke volumes of the care and ingenuity, to say nothing of expense lavished on the production.

THE spectator could not but be impressed with the awfulness of the subject,

and be better able to express more determined views as to the injustice of such severe alleged "retribution." Not only this, but the accuracy of the "dressing" made him acquainted with the costumes, buildings, vehicles, and surroundings of a far-off people, and brought him into direct line with a topic then in everyone's mind. We have only singled out one film, but there are few trick films but what have good points beside the chief one of entertaining, and many of the staid subjects, if we only were behind the scenes, would be found to have resorted to trickery to obtain the results, and yet they are decided educators, as witness the remarks of a writer in a north country paper: "It occurred to me that our Education Committee might increase the education rate and at the same time cover itself with glory, by providing each elementary school and all the training centres with a cinematograph apparatus and films on every possible subject. Think of the educational value of such a provision! First of all, the spectator takes a voyage to New York, in rather tempestuous weather. We get three views of the statue of Liberty in New York Harbour, with its background of sky-scrapers, so that if ever we go there we shall feel quite at home. We take a sail up the river, and see the battleships in Brooklyn Navy Yard, then return to Plymouth, in company with the mails and much gold and silver bullion. Quite free from fatigue, we start off at once to Russia, see the streets of St. Petersburg as they were on what is now called 'Red Sunday,' then rush off to the Far East, and see Russian and Japanese soldiers going to the war, and a transport passing through the streets of Dalny. We even see a building blown up at Port Arthur by the shells of the Japanese, though how this picture could be taken without the photographers being blown up, too, is a mystery."

WE are gratified to find the War Office has found the lantern play so large a part in procuring recruits, and that a circular memorandum has been issued to officers commanding at home and abroad inviting units to send photographs or films on Army subjects which would illustrate the life of a soldier in the Army. Pictures of soldiers on the march, on guard, and at drill have ceased to have attraction for the would-be recruit, and it is now intended to present to the possible soldier that side of Army life more likely to excite his interest and ambition.

PICTURES that give the civilian an idea of the life the soldier leads when not actually on duty or when serving abroad are needed. Views of famous military stations in India and the Colonies will be given, with types of the strange races he is brought into contact with while on foreign service. There is little doubt that this move, trivial as it may seem, on the part of the recruiting staff is a step in the right direction, and we are glad to find the War Office alive to the truth that lantern pictures to be effective must be frequently augmented and changed, and never allowed to become stereotyped and monotonous in their similarity.

THE optical lantern has recently figured extensively in Church services, and there are many places of worship where views of interest to the subject of the sermon are shown and help to relieve the monotony of the service, and bring home the truths that are enforced from the pulpit by making the congregation familiar with the scenes spoken of in the discourse. Clergymen who would fill their buildings have learnt that they must not be content with the time-honoured invitation of the church bell, but must seek modern methods to make their services attractive and to instruct, and at the same time bring home religious thought to the people who attend. We believe it was the late Mr. Haweis who made the innovation of classical violin solos and artistic lantern and picture shows at his services, and, seeing his success, many have followed the movement. But it remains for Sheffield to go a step further, for we find that two hard working curates of St. Phillip's Church, the Revs. P. H. Fearnley and T. C. Lawson, have conducted throughout the winter months wonderfully successful open-air magic lantern services. They did the thing in a most thorough manner in the poorest districts, and outside the particular court in which the next gathering was to take place was fixed a notice

board announcing the fact. The court was usually filled with a crowd of noisy children and a good number of adults. When the sheet had been set up and the word, "Silence," flashed on it from the lantern, a hymn was thrown on the screen in large letters, and it was curious to notice the windows opening and persons joining in the singing, which was accompanied by a cornet and clarionet. After a short prayer an address was given, the leading incidents being depicted by the help of slides, more well-known hymns were sung, and the whole tone of the service undoubtedly had a lasting impression on the poor people who would not enter a place of worship.

THE question of advertisements thrown on the fireproof curtain between the acts and spoiling the sequence of the play has been raised by Mrs Lewis Waller recently at the Camden Theatre. This lady refused to allow the continuity of "Zaza" to be broken by such announcements that So-and-So's Whisky is unrivalled, or the advantages of Mellin's Food for rearing infants. The manager of the theatre was, however, under contract to display these announcements to the audiences assembled in his house and finding the lady obdurate he decided to close the establishment altogether, sooner than break his faith with the lantern advertisement people. There is no doubt at all but that the tedious waits both in front of a play and between the acts are a great drawback to theatre going, and many have found the striking slides almost as amusing as the real performance. As advertisements they are unique, inasmuch as they impress hundreds of people with certain facts in an interesting manner that is likely to be retained by them. We cannot see any objection to their use as long as the pictures used are of a high order, in fact, some of the pictorial advertisements, such as Pears', not only have their value from their advertisement point of view, but also may be treated as art exhibits. We throw out the suggestion to those in charge that their policy must be to raise the standard of their pictures to as high a pitch as possible and we think that difficulties such as those that recently took place at the Camden Theatre will be rare.

COLOURING LANTERN SLIDES WITH ANILINE DYES.

A RELIEF FROM MONOTONY.

THE saying that "a lantern slide coloured is a lantern slide spoiled" is simply not true, for some of the most beautiful slides ever shown were painted by a Japanese artist. Moreover, colour gives more information than can be got from a plain side, and colour also aids the perspective. What is more tiresome than a succession of slides with bare skies, and what more troublesome than printing clouds in from a separate negative to overcome the monotony? Yet with aniline dyes it is quite easy to put in either a simple graded sky or one with clouds in a few minutes. With oil or water-colours, on the contrary, the sky is the most difficult portion of the picture to obtain satisfactorily, at least by non-professionals, for most amateurs get it streaky or stippled.

PRACTICAL MAXIMS.

AFTER trying both mediums I have some confidence in advising amateurs to try aniline colours, for the use of which the following few and simple directions may be of service:—

1. The slide to be coloured should be placed on a sheet of ground glass held in the opening of an ordinary retouching desk.
2. With a large brush charged with water and a drop of ox-gall, wash the film over the whole surface. This will remove any greasiness and prevent blisters which would otherwise occur if only a portion of the film be worked upon without previous wetting.

The film should now present a dull, moist surface without actual wet, and be capable of absorbing colour without any tendency to overrun the boundaries. See that no loose hairs from the brush are deposited.

3. Dilute the colour, if too strong, and get depth by repeated washes, except for small patches, which may be put on full strength, but no wash should be so dense as to clog details.
4. As a rule the density of the slide itself will yield the blacks, but occasionally; these may have to be assisted by colour. There is no satisfactory black amongst the aniline dyes, therefore, for branches of black, boots on figure studies, and similar small items, gum-water colour may be used with advantage.
5. If the slide be too pronounced in colour, soaking in water will move the excess, though this should not be necessary with ordinary care.
6. Dissolve the powder colours in boiling water, not in cold water, and keep them in small bottles. About six or seven colours will be ample.
7. For fine details use a magnifying glass.
8. Test every slide in a lantern before showing it in public.
9. Work with two brushes, one charged with colour and the other moistened with water for softening the colour, or for absorbing and removing any colour that has been accidentally put in the wrong place.
10. Work quickly, and do not let drops of colour remain on the film before spreading where wanted.—WALTER BAGSHAW.—*British Journal of Photography.*

[Letters which are of general interest to our readers are always welcome. They should be short and to the point, and must be accompanied by the name and address of the writer, as a guarantee of good faith, though not necessarily for publication. The Editor is not responsible for the opinions of his correspondents.]

AMERICAN AND ENGLISH LANTERNS.

Sir,—Can you give me the name and address of an American Journal in which I could see lanterns advertised in. As I would be ashamed to use the so-called Russian Iron Lanterns used in this country, or worse still, the Mahogany cased ones that go afire at every exhibition.—Yours, etc., J.C.

[In our opinion there are a number of good lanterns on the English Market, if you are only prepared to pay the price; if however you wish to obtain American goods you cannot do better than write for catalogues to the following: The Chicago Projecting Co., 225, Dearborn Street, Chicago, U.S.A., T. H. McAllister, 49, Nassau Street, New York, U.S.A. and Herbert J. Riley, 68-70, Nassau Street, New York, U.S.A.—ED.]

INTERESTING LETTER FROM NEW ZEALAND.

Sir,—I cannot allow the advent of your valuable lantern paper to pass without congratulating all concerned I used to enjoy the other magazine which ceased publication, but this is a great improvement and as a lanternist of some 20 years standing, shall look forward to receiving it with a great deal of interest. I find it exceedingly useful and it certainly would be a fine paper for beginners in lantern work. I hold a position here as Premier Lanternist, so much so, that the Borough Council have appointed me an Inspector of lantern, kinematograph, and all other classes of theatrical lighting. Whilst I do a small business in buying and selling lantern plants, as every kinematograph or lantern show that visits here has to notify the Council that it is going to show, and I have to inspect it. This gives me an opportunity of closing down shoddy and badly equipped shows. I have always kept a number of catalogues by me. I keep for travelling companies and local lanternists (of which there are 12 of us), a kind of reference catalogue library. I should like to thank the following of your advertisers, viz. :—Messrs. Paul, Hughes, Tylar, Kamm, Urban Trading Co., Warwick Trading Co., York & Son, Newton & Co., Butcher & Son, Perkens, Son & Rament. I have also had some from the Edison Co. of New York, Riley & Son and Tyler (Waterloo Road), Wilson & Son, Aberdeen, Slide Makers, Mr. Bamforth, and Wilkie & Locke. If I can assist English trade as a Britisher, I shall do it. Much success to your paper.—Yours, etc., C. F. POINTON, 78, Marine Parade, Napier, New Zealand,

COMMENDATION FROM MR. URBAN.

Sir,—Thanks much for the copy of the article on "Animated Photography," which I perused with much interest. This is a step in the right direction which if followed up by a campaign on these lines will certainly result in permanent improvement of the art, to the interest of which your journal appeals. Many thanks.—Yours, etc., C. URBAN, Managing Director, The Charles Urban Trading Company, Ltd.

DIFFICULTY IN OBTAINING COPIES IN BELFAST.

Sir,—I once more draw your attention to the fact that in Belfast we are unable to get your paper. Easton wants 5d. per copy, and altogether it is a trouble to get it. I don't see why I should have to pay postage to get it direct. I have one of the largest cinematograph exhibitions here, and it is important to get the information at once.—Yours, etc., J. C. SAVAGE.

[Our Correspondent should read Mr. Morris's letter below. We regret our friend's experience and trouble in obtaining copies, and shall be glad to appoint agents in any district not served. Of course, a year's subscription enables them to get a copy directly published. Our agent for Ireland is Mr. W. Lawrence, 56-57, Sackville Street, Dublin.—ED.]

NO DIFFICULTY IN CORK.

Sir,—I am subscriber to your journal and get it every month through a bookseller here, and I think it very good value and think also that if it was a weekly issue it would be of greater value still. Your articles on Modern Magic are capital, and your film list of new subjects is very good. Hoping that you will have a good sale for your paper.—Yours, etc., W. V. MORRIS, 34, Grand Parade, Cork.

Sir,—We beg to inform you that we have arranged with Messrs. Houghtons, Ltd., of 88 and 89, High Holborn, the exhibition in their windows of a selection of the winning pictures in the "Barnet Photographic Competition" They will be on view for two or three weeks. A note of this in your Journal will be much appreciated.—Yours truly, ELLIOTT & SONS, LTD.

MR. W. MANNING, of 53, Belgrave Road, Ilford, writes :—"The Journal came to hand this morning, for which many thanks. I have looked through No. 6, and am greatly pleased with it. The articles are especially bright and readable, which is more than can be said for many articles one has to wade through in the photo journals."

The Human Eye, showing the Muscles and Optic Nerve.

EYES

AND

How to Use Them.

BY

PROFESSOR GOLDING.

THEN the eyeball is enclosed in the orbit, a hollow cavity provided for it in the bony structure of the skull, and plentifully lined with soft and flexible structures, the entrance being guarded by the lid with its fringe of eyelashes. In this the eyeball, which is almost globular in shape, lies in safety, being free from pressure or disturbance, and at liberty to roll about to a considerable extent by the aid of the muscles by which it is suspended. The whole globe is enclosed in an almost opaque and very tough and horny coat known as the "Scelerotica," or more commonly as the white of the eye, this having two openings, one in front for the admission of light rays, and the other behind to allow of the entrance of the nerve which is to communicate with the brain.

Into the opening in front is fitted a very thin and transparent membrane, shaped very much like the glass which covers the face of a clock or watch, and serving very nearly the same purpose, that of protecting the delicate structures within, while offering no obstacle to the passage of light. This is the "Cornea" or horny part, and it may be looked upon as a window through which a view may be had of that which lies outside. Immediately behind this there is an extremely delicate and yet strong and perfectly transparent bag or membrane, containing a clear watery fluid, the "aqueous humour," which is surrounded by the opaque coloured diaphragm known as the "Iris," perhaps the most characteristic feature of the organ if not of the entire countenance, for upon it depends the colour of the eye as we commonly express it.

We speak of eyes being blue, brown, grey, or black, but we mean that the Iris is of one of these shades. The edges of this dip into the aqueous humour, and its central opening, the "Pupil," enlarges or contracts by the action of radiating muscles with which the Iris is plentifully supplied. Its purpose is to regulate the admission of light to the interior of the eye by closing partially when an excess of light tends to enter, and becoming more widely expanded when the light available is feeble and needs freer admission. In fact, the stop or diaphragm of the photographer's lens is a copy, in its essential features, of the Iris, and serves very much the same purpose, one form of it being well known as the "Iris diaphragm," from the way in which the enlargement or reduction of the central opening is provided for.

We are all familiar with the sensation of distress felt on stepping out of comparative darkness into the full blaze of the noonday sun or into a brilliantly lighted room, and the almost total inability to see anything when the change is in the reverse direction, from bright light into gloom, as well as with the way in which the eye gradually but speedily accommodates itself to the new conditions, the

pupil being closed or opened by the action of the involuntary muscles which regulate it, so as to admit just the right amount of light. If we observe the eye of a cat or any creature which seeks its food at night, we shall find that the pupil, which in the lower animals is oval or elliptical in shape instead of circular as in our own eyes, is reduced to little more than a narrow slit during the hours of bright daylight, and widely opened as darkness approaches, just as the photographer regulates the size of the diaphragm in front of his lens according to the degree of lighting of his subject or the sensitiveness of his plate.

Then, behind the Iris we come to the most important part of the optical system

Retinal image with eye aajusted for distinct vision of the near objects, the lilies.

Retinal image with the eye adjusted for distinct vision of a distant object, the garden seat.

of the eye, the exquisitely transparent "Crystalline" lens, contained in a most delicate and transparent membrane called the capsule. It is in shape a double convex, but of the form usually known as a "crossed" lens, that is, one whose curvature is different on its opposite sides, the one which faces the pupil, and through which the light enters, being less curved than the other. This lens, so transparent as to be almost invisible, is not of equal density throughout, but is composed of a number of layers, gradually increasing in density from front to back, thus causing the rays to be refracted gradually rather than suddenly, and only to assume their final direction on emerging from the back of the lens, which, though so beautifully transparent and so delicately formed, is not perfectly achromatic; nor, owing to its shape, can it be wholly free from spherical aberration; both these defects, if they can properly be so called, being partly compensated for by the pupil limiting the effective light to that which passes through the central parts of the lens, and excluding many of the marginal rays, while the image finally produced is received upon a curved and not a plane surface at the back of the eye. The capsule containing the Crystalline lens is attached by its margin to a ring-shaped body called the "Ciliary" or suspensory "ligament," the tightening or relaxation of which by the muscles to which it is attached appears to alter slightly the shape or curvature of the lens enclosed, and thus to modify its focal length and enable it to be focussed for objects at varying distances from the eye, any of which, within somewhat wide limits, can be seen distinctly and sharply in succession, but not all at the same time, as anyone may ascertain for himself if he will look through a window or between the bars of a fence at more distant objects beyond, when he will find that he can at pleasure obtain a distinct view of the window frame or the fence or of the

distant objects, but that he cannot concentrate his attention upon the one without losing sight of the other, at least so far as distinct vision is concerned.

The loss of this power of focussing or accommodation for objects at different distances is frequently one of the first symptoms of failure in sight due to advancing age, rendering the use of glasses necessary, a warning which should never be neglected if it is desired to preserve the sight from further injury. The lens may, however, be permanently of exceptionally long or short focus, or may gradually become so, where proper glasses will also be needed to remedy the long or short sight, and to obtain distinctness of vision. The Crystalline lens is sometimes liable to a gradual loss of transparency, the result of disease or injury, giving rise to the distressing affection known as "cataract," which, if it should run its course, can only end in total or almost total blindness, the only remedy in that case being the entire removal of the impaired lens, an operation frequently performed with success by a skilled oculist; its place being supplied by the use of suitable glasses worn in the usual way, by whose aid sight may be in large measure restored.

Behind the Crystalline lens, and occupying the remainder of the space within the eyeball, comes a jelly-like mass known as the "vitreous humour," enclosed like the other transparent substances, within a thin membrane called the "hyaloid membrane." This humour, though less refractive than the lens, is more so than the aqueous humour, and the rays of light having passed through these, and undergone more or less refraction in each, are eventually brought to a focus on the delicate network of nerve fibres which lines the back of the eyeball, and is termed the "Retina." On this most sensitive of surfaces the image of any object presented to the eye is focussed as on the ground glass screen of the camera, or the larger one on which images are projected by the Optical Lantern, both these instruments being, so to speak, reproductions on a larger scale of the optical system of the organs of vision, and depending on the same principles of refraction of light and the consequent production of images of luminous or illuminated objects presented before them.

The Retina is provided with a series of delicate projections, known from their shape as "rods and cones," whose vibration, under the influence of the light rays falling upon them, is supposed to give rise to the three primary colour sensations, Red, Green, and Violet, and to their various and innumerable combinations.

The nerve fibres of the Retina finally gather into one at a point near its centre, forming the "Optic Nerve," which, having no rods and cones on its surface, is itself quite insensitive to light. This nerve passes out through an opening at the back of the Scelerotica," called the "Punctum Caecum," or blind spot, and pursues its way to the brain, to which it gives up its mysterious vibrations, and by which they are interpreted as the various sensations of colour and of sight, so that if the eye fails to render the image distinctly on the surface of the Retina; if the Optic Nerve fails to convey the impressions accurately to the brain, or the brain be unable to interpret them correctly, in either case there can be no clear vision, and blindness, partial or complete, must result.

It has been said that the Scelerotica is opaque, but it is rendered so by its being lined with cells containing a black pigment called the "pigmentum nigrum." If this be absent or deficient, the Scelerotica will become translucent, something like opal glass, and every part of its front surface will admit a good deal of light, which does not pass through the transparent humours and lens, and therefore takes no part in the production of the image on the Retina, and only serves to create confusion, as stray light does when it enters the camera or falls upon the lantern screen. The person who suffers from this defect, which frequently occurs in rabbits and other animals as well as in man, is known as an "Albino," and usually has pinkish looking eyes, very weak, and much dazzled by the excess of light which enters all over the surface of the eyeball, and serves no useful part in the phenomena of vision. The late Viscount Sherbrooke, better known as the Right Hon. Robert Lowe, a distinguished statesman of the last century, suffered

throughout his life from this defect of vision, and was greatly inconvenienced by it until almost by accident he discovered that a contrivance resembling one used by the Esquimaux, and called by them "snow eyes," was capable of giving him considerable relief. It consisted of a small diaphragm or opening in the centre of a disc, just sufficiently large to admit light to the pupil of the eye, while the remainder of the eyeball was covered.

A pair of these, mounted in ordinary spectacle frames, excluded the superfluous light, and only admitted so much as the eyes could comfortably bear and usefully employ; and thus late in life the statesman obtained the advantage of clearer vision than he had ever enjoyed in his earlier years.

While the eye is thus adapted specially for the reception and interpretation of the rays of light, it would appear that mechanical disturbance can affect it to some extent. We are familiar with the flash of light which appears to pass before the eyes at the moment of a fall or any sudden shock, such as a blow upon the face, while drunkenness or disease will bring with them visions apparently very real, but having no actual counterpart in objects before us. This may possibly account for some delusions and strange appearances which a person may in perfect good faith suppose himself to have seen, and which have produced the same effect on the Retina or the brain as if they had been actually present before him.

But here, for the present, we must pause. Having considered the structure of the organs of sight and the nature of the impressions they are so admirably designed to convey, we will, with the Editor's kind permission, reserve for a later opportunity the consideration of how we may employ those organs to the best advantage.

Queries.

Readers are requested to write each question as concisely as possible on one side of a separate sheet. Name and address to be given for reference. We are not responsible for the opinion expressed. Readers are invited to reply to Queries, and should state number and title of same.

23 **Astronomical Slides.**—I wish to add to my own set of astronomical slides a few that I cannot photograph myself. Can you recommend a firm who would be likely to supply single slides on this subject.—ASTRONOMY.

24 **Opaque Lanterns.**—In a recent daily newspaper I saw a report of a so-called new invention, which to me appeared to be a modification of a lantern, I have seen advertised somewhere, for the projection of opaque objects. Can any of your readers tell me anything definite about this apparatus.—E.R.S.

25 **Flickerless Animated Projections.**—I have often seen it stated that a certain projector is practically flickerless, but on inspecting results have been disappointed. I now have an idea for producing a machine that will give absolutely flickerless projections; but before patenting, or going to the expense of further experiments, I should like to learn whether or not anything like my conception has been introduced or provisionally protected. Any information on the subject will be of service.—S. H. BARBER.

26 **Soap Bubbles Projected.**—In a series of scientific lectures I am preparing, I wish to deal with soap bubbles, colours, etc. I am told that an article on the subject appeared in the *Optical Magic Lantern Journal*, some years ago. Please give me issue and date so that I may procure it, and where would such a publication be on sale now; or should I have to advertise for same?—EXPERIMENTS.

ANSWERS.

21 **Beads.**—These can be obtained at the makers of your jet, Messrs. Hepworth & Co., Cecil Court, Charing Cross Road, London. If you require them a special size, any wood turner would make them in boxwood for you at a cost of a few pence.—F.R.

22 **Shock from Arc Lamp.**—Cover those parts of the wire likely to come into contact with the hand whilst operating, with rubber. The easiest way to do this is to use the small rubber tubing used for Photographic Shutters, obtainable of The Altrincham Rubber Co., Mossburn Buildings, Altrincham. The wire should be detached from the lamp and threaded through the tubing, and then connected up again.—H. S. BOYCE.

Optical Illusions.

No. V.

By EDMUND H. WILKIE, *Of the late Royal Polytechnic Institution.*

Last month we left the young lady in our illusion smiling a contented smile, as who would not, under similar circumstances, being quite free from most of "the ills the flesh is heir to" on account of a total absence of body. To prove to us that we could really see to the back of this small apartment, the exhibitor explained that he would go to the back, and, opening a panel, look through at us.

In the illustration (last chapter) an inner line will be noticed round the back wall. This is a removable panel, and, when taken out of its place, we could see right through to where the showman bowed, the head still being apparently disconnected from any possible body. After having read the description of "The Delphic Oracle," it will at once occur to our minds that this illusion is worked in the same manner, by means of the mirror inclining towards the back, and with a hole through the centre. The brass rods are really only halves, being flat on one side from end to end, and would exhibit a semi-circular section. Being fixed on to the surface of the reflecting glass, they appear as whole rods, and this will at once explain why they are placed at the particular angle they occupy.

But now comes the question—How does the exhibitor show himself through from the back? He cannot be solid; we must be looking at a reflection, as we know that he could not be seen through the mirror.

Where is he reflected from? Only one place is possible, and that is the top. This suggestion, however, does not lead us much further, for on consideration we find that if he removed a panel in the top of the chamber, and bent over to show himself, his image would be reversed, and would then appear head downwards.

FIG. XV.

The difficulty is overcome in the manner shown in the sectional view (Fig. XV.), where we see the remainder of the young lady's body hidden behind the sloping reflector, as in the last illusion. The mirror which con-

ceals her body has its reflecting surface upwards, and above it a panel in the top. which, when reflected, appears as the one in the back of our front view of this illusion. Above this panel, which is removed in our sectional view, is another mirror with its reflecting surface downwards, and facing that at "the mystic angle" we find another panel in a vertical position.

It will be seen that if this middle panel is closed its reflection will be received in the lower mirror, and will appear as the back of the small chamber in which the living head appears to be suspended, When the operator has taken his position at the rear, as we see him in the illustration, the panel is removed, and we think we see him, but owing to his image being reflected twice, he appears standing a little way back from the open panel behind the lady's head.

The illusions I have treated upon so far have been accomplished, in the first instance, by simple light and shade, then by reflection from sheets of plain glass, then levitation by sliding plates of transparent glass, and recently by means of plain mirrors placed at an angle; so we will now take a step further, and consider a few effects, the result of plain mirrors placed at an angle, and acting in concert with each other.

It might be urged that the last illusion we described would come under that heading, but that is not so, as it was perfect in itself without the aid of the second reflector for producing the image of the assistant. Many scientific toys have been formed by the use of two pieces of looking glass, as, for instance, "The Kaleidoscope," and Professor Wheatstone's "Reflecting Stereoscope," which has no lenses, but owes its properties solely to two pieces of silvered glass.

Some time back I and others were attracted by a crowd at a street corner, and on pressing forward to see what was the matter, were amused to find that an ingenious mechanic out of work, had constructed an instrument which enabled the observer to look straight through a brick.

Now this is not very new, and no doubt many of the readers of this Journal will recognise the apparatus at once, but for the benefit of the few who possibly are not acquainted with it, we will ask them to bear with us for a few moments.

In outward form it resembled Fig. XVI., and on looking in at (A) through what appeared to be a powerful eye piece, the spectator was able to see objects on the other side of the street, in spite of the fact that a brick was intervening in the centre of the apparatus. The body of this elaborate machine was mainly composed of three cigar boxes, with pieces of brass tube let in at each end. The "lenses" in the ends of these tubes were composed of circles of plain window glass, and the scheme of the whole illusion will be seen on reference to the diagram, the double

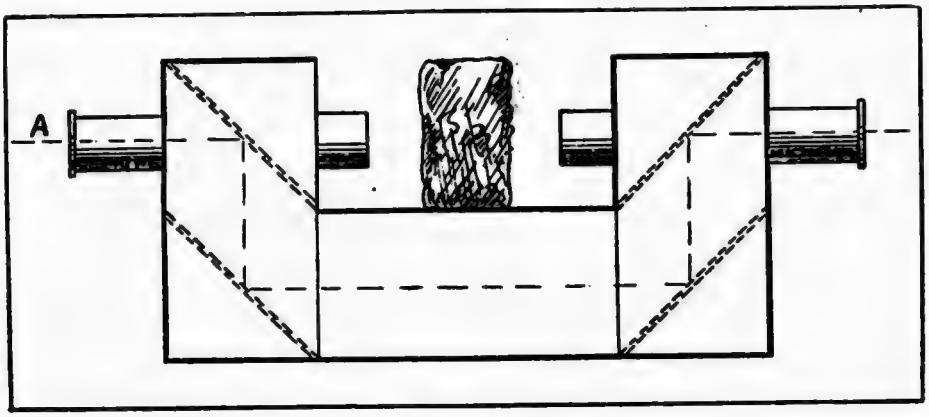

FIG. XVI.

dotted lines shewing the position of the mirrors, and the single dotted line is the line of reflection. The whole instrument reminded us very forcibly of the "patent double-million magnifyin' gas microscopes of hextra power" spoken of by Samuel Weller in the trial scene in Charles Dickens' "Pickwick Papers," and by the aid of which he considered he would be able to see through a brick wall.

Amongst the most striking illusions brought before the public during the connection of Mr. Thomas Tobin with Professor Pepper at the Royal Polytechnic, was a striking if rather ghastly effect, entitled, "The Head of the Decapitated speaking." Although horrible in appearance, it caused much wonder and entertainment amongst the large crowds of people who flocked to see it every afternoon and evening, many of whom, having paid a shilling to get in, would have gladly given two to get out again when the curtain was raised.

It was the custom to preface these illusions with a short lecture on illusory subjects just

to fill in time, as none of these effects occupied long in actual exhibition. In this case the story which introduced the effect preluded the disclosure of the scene, and although I cannot vouch for the correctness of the words I shall presently give you, after the lapse of so many years, will tell you the tale in my own way.

Some time in the Middle Ages, a conveniently vague date, there lived somewhere or other (we are very distressed, but really cannot give more definite particulars) a magician, not a parlour magician who burns handkerchiefs and restores them charmingly scented immediately afterwards, but a regular right down genuine magician, who was generally credited by the surrounding nobility, gentry, and general inhabitants with the possession of knowledge greatly in advance of his contemporaries, and as one's neighbours generally know more about one's affairs than one's self, it naturally follows that they must have been correct.

He held communion with the stars, not the "Three Stars" we mostly find in connection with the names of Hennessy and Martell, but the glittering orbs of night as they shone forth in radiant beauty through the soft eastern air. By constant study he had mastered some of the innermost secrets of Nature, the learning of the ancient Chaldees has descended to him, and as he sat on his solitary tower, night after night, he conversed with "The Great Bear" in the most familiar manner. Let us drop the curtain before him, and "ring up" on another scene—an Italian Palace, night. Through the large arches of a portico, partially hidden by heavy silken curtains, a magnificent garden is seen brilliantly illuminated by the moon's pale beams, the air is heavy with perfumes emanating from a large chased silver lamp, wnich hangs suspended by chains from the painted ceiling, and the silence is broken only by the plashing of the fountain without, and the hurried footsteps of a man within.

It is, indeed, a scene where all around is beautiful, and only man is vile; at least, this one was.

Those were the times when might was right, when the owner of each estate was entitled prince, and each prince exercised almost sovereign power. He had been prodigal of his wealth, and had brought himself to the verge of ruin; his days were miserable, and his nights sleepless. He reflected, he must do something—or somebody—it did not matter which, and it came into his mind that his nearest neighbour, Count Capo di Monti, a man of learning, who lived in seclusion, and was said to possess great wealth, was a suitable subject for the exercise of his talents. Accordingly, he engaged two unscrupulous men to kidnap the Count, and we first make his acquaintance, awaiting their return with their victim.

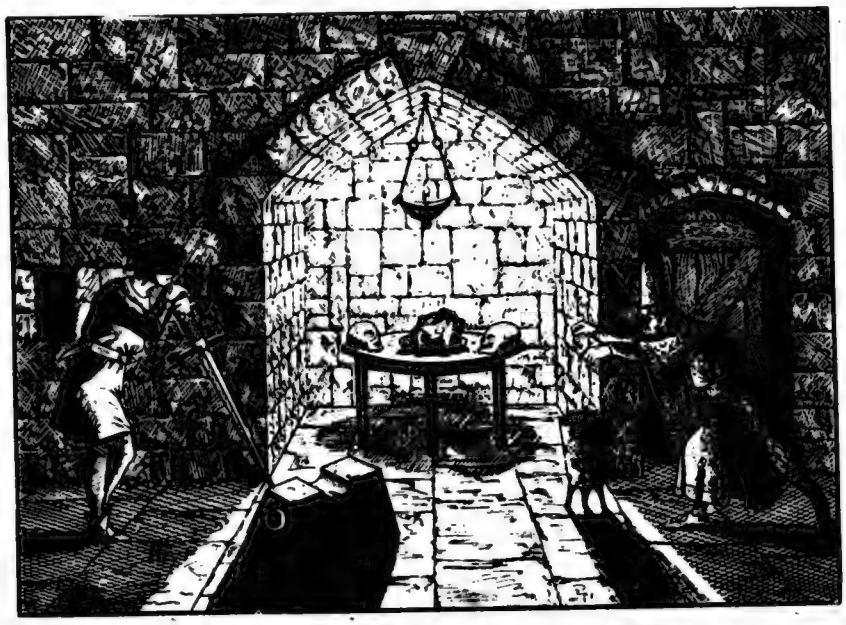

FIG. XVII.

Soon footsteps were heard on the gravel. He advanced to the garden entrance, and signed to the villains to take their burden to the extreme end of the building, where stood a ruined tower, under which was the old torture chamber.

After a short interval or agitated indecision he made his way in the same direction, where we shall follow him——in our next.

(To be continued.)

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THREE REQUISITES FOR A SUCCESSFUL LANTERN LECTURE.

By the Rev. T. Perkins.

LANTERN shows have certainly lost something of the popularity they once enjoyed. I well remember what full rooms a lecture, illustrated by slides shown with limelight, used to draw in a country town in which I lived twenty years ago. This popularity was due to several reasons; before that time the public had been in the habit of associating the magic lantern with the exhibition of hand-painted slides, for the most part of a comic nature. When, however, photography was pressed into the service, the wonderful realism of the results took every one by surprise; the slides, too, made commercially, were technically perfect from the then popular point of view, though they would not satisfy the educated taste of the present day. Moreover, such lectures were not of very frequent occurrence. There was a novelty about them which attracted. The lecturer, who travelled from town to town to fulfil engagements, possessed some skill in lecturing, and he knew his subject thoroughly. But before long two innovations took place, both tending to decrease the popularity of lectures. The amateur, taking advantage of the introduction of gelatine lantern plates, began to make slides, and was so proud of his productions that, without taking time to perfect himself in the difficult art of slide making, he exhibited his crude work in public, and, however good his lecturing might be—and it was often far from good—the poorness of his slides made people shy of attending lantern lectures; the slides were foggy, flat, dingy, and these defects were often exaggerated by showing them on far too large a scale. The other cause of the decrease of popular favour was quite different. It was due to the introduction of the system of letting out sets of slides on hire with an accompanying reading. The reading was often poor, of the guide book order, destitute of all literary grace, and was read at the exhibition of slides, a few hours after their arrival, by someone who possibly knew nothing of the subject, and had not had time even to read it through beforehand. Thus, even if the slides were good, the lecture was so dull and dreary that no one who had endured one lecture of this kind would care to go through another. If lantern lectures are to regain their former popularity, greater attention must be paid to three things: (1) The art of lecturing, (2) the quality of the slides, and (3) the manner in which they are shown.

No one would think of singing in public without careful preparation and rehearsal, without having the song learned by heart, even if the words and music be held in the hand to act as a prompter if the memory should fail; but the reader at a lantern entertainment is often quite satisfied to stand at a desk, with his eyes fixed on the printed words of the "illustrative reading," illuminated by the shaded lamp, and ring the bell or give some other agreed on signal when he comes to the mark in the letterpress indicating that a fresh slide is needed. My advice to the lecturer is, in the first place, not to attempt to lecture on a subject that he has not "at his finger's ends," as the saying is, and to rehearse the lecture in private until he can deliver it "extempore," or nearly so. To do this he should prepare a MS. list of all the slides, duly numbered, with any

necessary note, such as a date or name, clearly written opposite to the title. Then let him arrange the slides in their proper order on a table, and, having the MS. list close at hand, let him take up each slide in turn, and, holding it in his hand, deliver the remarks he intends to make in public with the proper intonation and emphasis; sometimes it will be sufficient simply to announce the title, in other cases it will be necessary to call attention to some special point in the slide, or to tell the story of some event or legend connected with the place represented. All this must be done in an easy, natural manner, and this manner is not inconsistent with careful preparation beforehand. It will be much easier to lecture well if the slides have been made from the lecturer's own negatives, as then the subjects will be familiar, and the object with which negative was made well known to him. Of course, not every one has the power of lecturing efficiently, just as it is not every one who can speak fluently, yet much in most cases may be done by practice; but if practice fails to work an improvement, let the would-be lecturer acknowledge to himself that he has mistaken his vocation and cease to irritate others, and bring discredit on lantern lectures by his incompetence. The knack of speaking so that one may be heard by every one of the audience who is not deaf should be aimed at; loud speaking is not necessary, clearness of utterance is of far more importance; if the hall is a large one, or one of which the acoustic properties are bad, it may be necessary to have recourse to the staccato style often noticed on the stage. Many speakers fail by raising their voices unduly and then dropping them at the end of the sentence; rapid speaking is not well heard, and the larger the hall the slower must the utterance be.

The next matter to which attention must be paid is the quality of the slides. It is always well that the lecturer should make his own slides from his own negatives; he must, therefore, know a good slide when he sees it. At one time brilliant slides, such as were the majority of those produced commercially on wet collodion, were much in favour, and these will still generally gain applause from uneducated spectators, but educated taste demands something very different. The brilliant black and white slide resembles the limelit scenery of the stage rather than the quieter lighting of nature, and it is the latter that should be aimed at. Softness, delicacy, the absence of large masses of deep shadow, and still more the reduction of absolutely clear glass to a minimum are desirable. No part of a good slide is absolutely opaque, there should be detail in the deepest shadow. Landscapes should never be shown with purely clear skies. There are more ways than one in which clouds can be introduced; some print the landscape part on one plate, and the sky, from a different negative, on another, and use the latter as a cover glass; others print both landscape and sky on the same plate from two different negatives, just as they double-print their paper positives. Another method is to shade, if necessary, the landscape portion of the negative, and so give the sky a fuller exposure, and bring out any traces of cloud to be found in the original negative. The first of these three methods involves the practical difficulty of getting the same tone on the landscape and sky plates; any want of harmony in color would, of course, ruin the effect. My own method is, as far as possible, to get the effect desired by development or reduction in the negative, and to reproduce this by straightforward printing on the transparency plate, shading, if necessary, during the printing. One piece of advice is important: never be satisfied to put into a lecture set any slide that is not the very best that can be obtained from the negative. It is surprising what differences in character may be given to a slide by variation of exposure and development; a strong slide may be obtained from a flat negative by reducing the intensity of the light, a soft slide from a hard negative by increasing it. It is sometimes worth while to make a transparency on a negative plate, and from this a fresh negative, modifying by exposure, development, intensification, or reduction original negative, transparancy, and reproduced negative, until we have a negative from which a really good slide can be printed. This is somewhat troublesome, but it is better to take this trouble than to show a bad slide. It may be that whatever trouble we take we

cannot get a really good slide, and cannot get a fresh negative of the subject, which, however, for some reason we wish to show; in that case, having got as good a slide as possible, we must show it with a few words of apology or explanation; but it is well not to show too many slides needing apology in one evening. A uniform colour in a set of slides should be carefully avoided, as the monotony becomes very tedious. Now, that by varying exposure and development so wide a range of colour may be obtained, there is no excuse for monotony. The proper masking of slides is important; at one time almost all slides had circular openings such are rarely seen now; cushion shaped masks should *never* be used, oval ones *seldom*, rectangular openings with the ratio of the length of the sides carefully chosen to suit the subjects are almost always the most pleasing.

The third condition for a successful lecture is, unfortunately, not always under the control of the lecturer. Most of us must at times have suffered from warped screens, poor illumination, bad projecting lenses, and incompetent operators. These things are very annoying, but the lecturer may take a grain of comfort from the fact that, from his position near the screen and at one side of it, the defects arising from a baggy sheet look far worse than when seen by those sitting further off in front of it. When a lecture is thus marred by bad apparatus used in exhibiting the slides, it is well to complain to the organisers of the exhibition, and to say, "My reputation as a lecturer is at stake, so if you want me to come again you must see that these things are altered." There is a tendency on the part of many operators to show the slides on too large a scale. I have, however, on several occasions induced them to bring their lanterns nearer to the screen, so as to reduce the scale and increase the brilliancy of the projections. The best surface for the exhibition of slides is a wall smoothly plastered and washed with a wash, the rawness of the white of which has been got rid of by the addition of a little yellow ochre. This solid screen should only be sufficiently raised at the bottom to prevent shadows from any of the audience falling on it, and the lantern should be raised so that the axis of the lens is horizontal, and intersects the screen in its centre.

A Living Lamp.—According to *Cassell's Magazine*, it is well known that an ideal lamp would give us the maximum of light with the minimum of heat, like a glowworm or a firefly, and an attempt has been made to utilise luminous bacteria to this end. M. Dubois cultivates photo-bacteria in various liquids, and encloses the creatures in glass vessels, which yield a light about as intense as moonshine. He confidently expects to improve on his first results, and actually give us a serviceable lamp of the kind. "Turn on the bacteria" would sound almost as well as "Let loose the gorgonzola."

NOTICES.

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Publishers.—Heron & Co., 9 & 11, Tottenham Street, W. Telegrams, "Heronicus London." Telephone, 4777 Gerrard.

Wholesale Agents.—F. Brett, 5, Pilgrim Street, E.C. John Heywood, Deansgate, Manchester. W. Lawrence, 5, 6 & 7, Sackville Street, Dublin.

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By. J. Page Croft.

WE photographers are a strange race. We talk of our freedom in thought, word and action, and not undeservedly boast of the glorious freedom of our constitution. And yet we fail to put such freedom wholly into practice in our photography. Notwithstanding the more plastic and expansive methods now obtainable, we still cling to the nice, prim, stiff, clean work as of old, which many of us will live to regard as obsolete and out-of-date.

When we see broad effects in painting, which have been obtained by bold free colouring with a total absence of all non-effective trivialities in detail, we do not at once assert that the painter would be unable to supply such detail if he wished, although after all, if he did not consider minor matters desirable, whether he could reproduce same or not is surely immaterial. And yet when a photographer endeavours to exercise his freedom of thought in bold free treatment, we are apt to charge him with incapacity of technical ability, because his gift has been used in a manner contrary to our ideas of fitness. The charge of poverty in technique is often laid against a worker, because he does not chose to handle the matter in the way which many consider of technical merit. Such a person is frequently charged with scamping his work, because he does not do it in the more orthodox manner; and the conclusion is drawn, that, there being no evidence of technique, there is no knowledge beyond, and the subject has been treated in this particular manner, because it is easier for the worker to do so. Did we endeavour to prove the case by personal experience, far from being easier, it would at once be realised that an immense amount of thought was necessary, as the demand was to the head rather than the hand. We should very quickly discover that the apparent ease with which this effort had been obtained in such a simple manner, required a great deal of work before such simplicity could be satisfactorily suggested. When we see a clever performance on the stage, or hear a noted violinist, the very ease with which the results are obtained, while appealing to our admiration suggest to us that the effort required is one of but childish simplicity And so in acting; while our leading artistes are those who say their lines in a natural. every day fashion, we have but to try the same on the stage, to at once recognise the high technique and talent required for such a performance. Did the public performers reveal that any undue force or strength were necessary, such an exhibition would be of a painful rather than a pleasing character. In other words, if their technique be apparent, their work would be robbed of its great charm. And so in matters photographic. If the so-called technique be not concealed, the photographer is but a draughtsman or copyist and no artist.

The target that is set at but a medium height makes no call to a great elevation, and consequently ensures but a moderate flight. Thus, to be "fancy free," to unrestrainedly follow one's individual bent, one must, and *should* not only be content to take, but court the risk incidental to the highest undertakings, realising that the blow will not strike higher than the reach.

A loose rein should be extended to taste, to make unhindered its own pace, for thus only will freedom of work be attained. Freedom in thought and act is therefore essential to break from the path which insists that work shall proclaim the power of the lens and the excellence of material, rather than the action and of the brain.

THE SCIENCE OF ANIMATOGRAPHY.

(By the Editor.)

Chapter V.

THE experience we have had in the production of animated photographs leads us to the conclusion that the would-be-Animatographist may save himself much useless labour and fruitless expense by closely studying the merits and demerits in the work of others. Next to a thorough mastering of the technicalities of this art, the question of composition and class of subject to be attempted may engage the thoughts of the novice. Before putting his ideas into practice, however, let him see many shows and many subjects. Let him scrutinise every projection with the eye of the severest critic. He should consider the picture from a point of interest; from a point of technical quality; and from a point of popularity with the audience. From such a practice he may expect to learn that which is of the utmost value to the Animatographist. If he is not sufficiently alert to detect the faults and to appreciate the successes, let him at once give up the idea of picture making for the public, for surely he lacks the chief essentials to possible success.

It is not difficult to call back to one's mental eye pictures that have once impressed it, and we may do so now for the purpose of looking in imagination at some of their characteristics, desirable and otherwise.

When photographing street scenes, it is often a difficult matter to obtain a secluded spot from which to operate; yet, at some little sacrifice of effects in other directions, such a position should be taken up.

Nothing is more objectionable in a cinematograph picture than the presence of foreground figures, who were obviously conscious of the fact that they were being taken, and who have demonstrated the fact by their stupid grins in the direction of the camera lens.

We once saw an otherwise grand picture of a street scene in St. Petersburg utterly spoiled in the manner indicated. Almost every person coming in range of the camera, after walking a few steps into view, turned round and gazed curiously at the camera, thus blocking out for the time being other more important and interesting things.

But it is not always the prominent position of the camera man which attracts attention; it is sometimes the click of his apparatus. The clicking of the camera being within hearing distance of passers-by will arrest attention, and bring about objectionable results of a similar character. For this reason the ideal camera would be one in which silent action was embodied; and we hope that this improvement on present appliances may soon be found, not only in the camera, but also in the projecting apparatus.

Avoid dazzling composition, is advice that each film maker should take to heart. We have already intimated that overcrowding is one of the many evils of some of the present day pictures. There are pictures representative of operatic scenes, in which many dancers take part. In watching the real spectacle upon the stage, one becomes weary; and a cinematograph representation of the same generally proves a failure. The reason is not far to seek. The human eyes are capable of great activity; but when faked in the watching of more than one object at a time, the strain to the mind soon proves itself objectionable. This is especially true when the object of attention (say a certain dancer in a group) is momentarily hidden from view by others coming in front. The effort to follow the selected figure becomes a source of irritation; and eventually the cause of disinterestedness on the part of the observer.

Contrary to such results may be mentioned the pleasure and complete satisfaction derived from the inspection of a subject, in which there is only one point of especial attraction. A subject, consisting of a single female dancer, occupying two-thirds the entire height of the picture, may be watched without the interruptions above referred to, with the consequence that there is no strain whatever to the visual faculties.

Every graceful line formulated by the movements of the dancing figure is traced upon the retina, and assimilated in the mind with a sense of natural satisfaction; whilst the undivided attention, made possible by the simplicity of the arrangement, proves an adequate source of stimulation to the mind, and is to the eye what harmony is to the ear, a perfect, independent, and beautiful whole.

Speaking of harmony reminds one of the process of synchronising sound with movement. Messrs. Gaumont and Mexter's "Chronophone" professes to do this; but in combination with the single dancer subject, there is another method that may be adopted with very pleasing results. If appropriate dance music is played by the pianist, taking up his position somewhere in front of the screen, it is not a difficult matter for him to suit his touch and time to what his eye can see. This system of combination is good, insomuch that the music is first hand, and the picture of the dancer may be of such magnitude that every movement is easily perceived from the remotest corner of the hall.

(To be Continued.)

LANTERN LECTURES ON BRITISH INDUSTRIES.

CONSIDERABLE progress has been made with the arrangements for the delivery of lantern lectures on the progress of British industries, organised by Mr. Ben H. Morgan, throughout British colonies and foreign markets. The first industry to receive attention under this scheme is that of engineering, in connection with which Sir William Preece, Colonel R. E. Crompton, Mr. James Swinburne, Professor Ripper, Mr. W. H. Maxwell, and others will explain in detail the advancement that has been made in recent years. The Colonial Governments have received the scheme well, feeling that some special efforts were necessary to re-establish the character of British goods in their markets where in recent years foreign goods have so rapidly advanced in favour. These Governments have greatly facilitated the work of organising the lectures, and have arranged for them to be read before chambers of commerce, engineering and scientific institutions, technical schools, colleges, etc. Equally encouraging progress has been made in foreign industrial centres, where lectures are welcomed as a means of educating students and manufacturers. In the course of the next few months readings will take place throughout the whole of the British colonies, in the Government technical schools of Russia and Austria, before the great educational institution at Charlottenburg, before institutions in France, Italy, and Sweden, and most of the leading universities and trade societies in the United States. Secretaries of trade and educational institutions of the British colonies are specially invited to make application for copies of these lectures and sets of lantern views, which will be sent to them free of charge by the hon. organiser, Mr. Ben H. Morgan, Orchard House, Westminster, S.W.

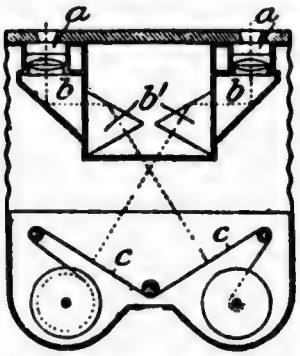
Stereoscopic Notes.

Hint to Stereoscopists.

The half-tone illustration on this page is intended to show the evils arising from too great a separation of the lenses or view points in stereoscopic photography. It should always be remembered that there is a normal angle in binocular vision, which must be regarded if complete success is to accompany one's work. The normal separation of the human eyes, measuring the distance between the pupillary centres, is found to be 2½ inches. For all general landscape work in which the nearest object is not closer to the camera than 6 feet, a separation for the lenses of 2¾ inches will not be too much to give an accurate stereoscopic perspective; if, however, the lenses are displaced a distance apart of 3 to 4 inches, an exaggerated relief will be the result, and the twin photographs so obtained will give the observer some considerable difficulty in his endeavours to coalesce the pictures. An instance of this sort will be clearly demonstrated if the reader will examine the accompanying reproduction in a stereoscope. It will be noticed that the boy's left arm appears twice the length from the hand to the elbow as it is measuring from the elbow to the top of the shoulder. This stereoscopic falsehood has its analogy in single picture making when a wide-angle lens is used. A lens that exaggerates the size of a near object and throws it all out of proportion with other objects at a more remote plane.

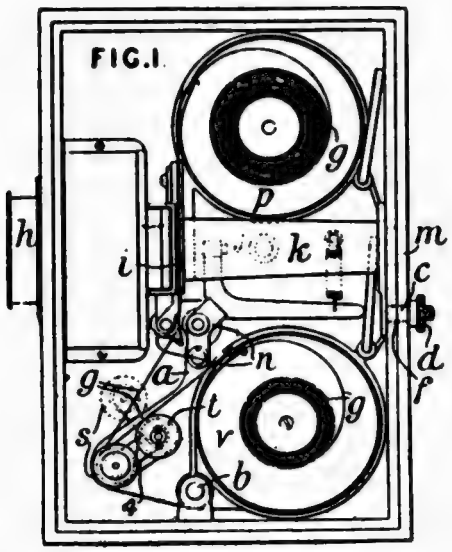
A Transposing Stereoscopic Camera.

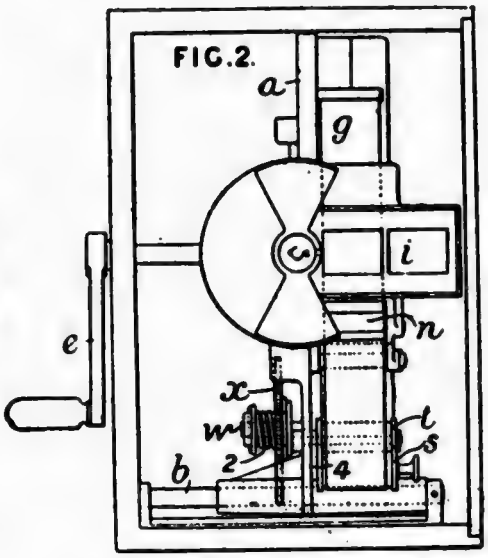
It is well known that when stereoscopic pictures are obtained by means of the ordinary twin-lens camera, the double positive from the negative so obtained requires cutting apart for the purpose of transposition. The two pictures have to change places before they are in their proper order for examination in the stereoscope. This troublesome stage of the work often leads the amateur to make mistakes, especially when the prints are mounted separately. Many workers prefer to cut the negative asunder and remount on a supplementary glass after changing the position of the dissimilar pair. This precaution makes after mistakes impossible, as the prints will then be on one sheet of paper and always in their proper order for the stereoscope. To those who find this work of transposition of the prints or negatives a tedious operation, the transposing camera at J. S. A. Tournier, Bourges, France, may prove a welcomed novelty. As will be seen by reference to the accompanying cut, transposition of the dissimilar images is produced by means of reflecting mirrors or prisms. The rays entering the lenses at *a* are reflected from *b* to b^1 and from thence to the film *c*. Thus the image taken by the left lens is received on the right hand portion of the film, whilst that taken by the right lens is received on on the left hand portion of the film. The consequence is that when the print is taken from the developed film, and the print is inverted the pair will be in their proper order for immediate examination in stereoscope



In connection with the subject in hand it may be mentioned that the instrument which we described on page 101 of this Journal called the Stereo-Photo-Duplicon also makes provision for direct transposition of the twin images received upon the sensitive plate.

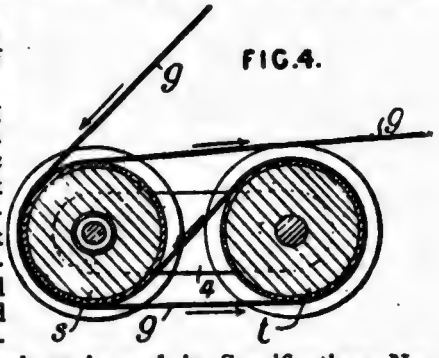
PATENTS.





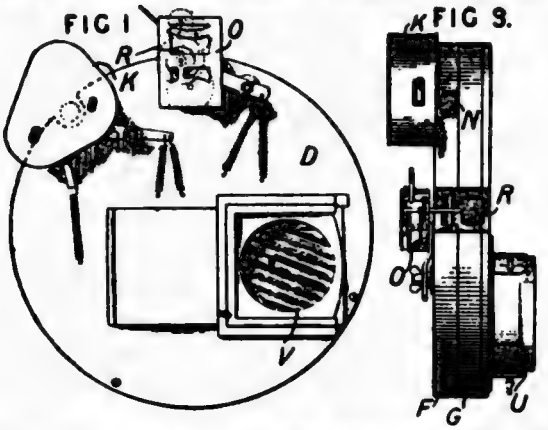
No. 26,579. Photography. BRITISH MUTOSCOPE & BIOGRAPH CO., and MASON, J., 18, Great Windmill Street, Shaftesbury Avenue, London, W. December 4.

Kinematographic apparatus; Cameras.—In kinematographic and other cameras, a snubbing-device for controlling the take-up of the film is described, and is applicable for cameras of the type described in Specification No. 5995, A.D. 1897. The focussing-screen *i*, Figs. 1 and 2, is mounted in the same plane as the film *g*, and the whole frame *a* carrying the actuating-mechanism can be moved by the handle *e* so as to bring the screen *i* opposite the lens *h* and in view through the opening *m* at the end of the trunk *k*. A projecting stud *c* from the frame *a* slides in a slot *f*, and is clamped by the nut *d*. The intermittent feed rollers *n* and actuating-mechanism is such as is used in Specifications Nos. 21,754, 21,755 and 21,756, A.D. 1899. The film *g* is drawn from the box *p* in front of the exposure aperture, between the feed rollers *n*, over the post *s*, round under the post *t*, then back again round under the post *s* and thence to the take-up roller *v*, as illustrated in Fig. 4. The roller *v* is actuated from the wheel *x* through the frictional connection 2 and the spindle *w*. The posts *s*, *t* are carried on a pivoted frame 4, and are covered so that the portions of the film passing over in opposite directions will not scratch. This snubbing-device prevents the transmission of sufficient tension from the roller *v* to move the film during exposure, and whenever the roller *v* stops, the friction device 2 allows the driving-wheel *x* to slip on the spindle *w*. The invention is described as applicable to any kinematographic exhibiting or projecting apparatus.



No. 24,231. Magic Lanterns and like Projecting Apparatus; Zoetropes. MENCHEN, J., 1237, Broadway, New York, U.S.A. November 7.

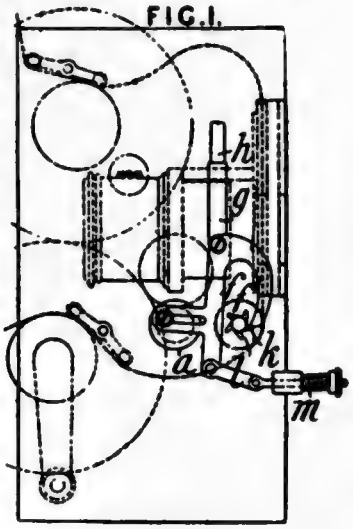
Relates to a device for projecting representations of animated objects on screens Fig 1 shows clockwork mechanisms K, O mounted on the casing D for rotating in opposite senses by means of friction-wheels R, N, Figs. 1 and 3, a disc preferably of translucent material mounted in the part G, Fig. 3, of the casing, and also another disc in the part F with a corrugated surface. Pictures of animate objects are painted on the disc which rotates in the section G; the whole apparatus is then secured to a projecting lantern by the collar U, and the clockwork started. One or more lens openings V are provided on the front of the casing, and a reinforcing disc passes all round between the sections F, G. Movements other than rotary may be given to the discs.



No. 23,474. Kinematographs. MOON, H H., Parkfield, Park Road, Moseley. October 29.

Fig 1 shows an arrangement for feeding and steadying the film. The film roller *l* is operated by a pawl f^1, which is pivoted to a bar *g* reciprocating in a slot *h*. A lever *f*, integral with the pawl, is acted upon by a spring *m* to press it against a pair of the teeth *k*, and thus steady the roller during the exposures. The lever *f* is pulled on one side by a crank *a* during the operation of the roller.

FIG. 1.

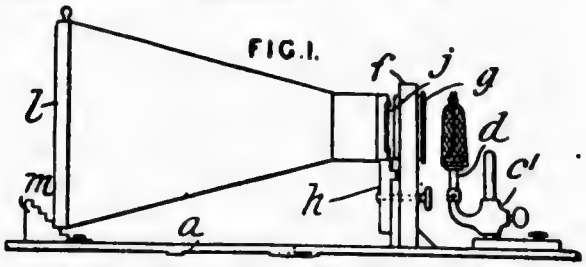


No. 23,752. Celluloid-like Compositions. FELL, J. C., 1, Queen Victoria Street, London, E.C. November 2.

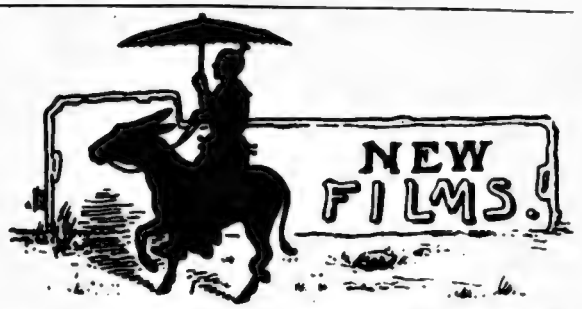
In producing a celluloid-like composition consisting largely of casein and nitro-cellulose, the two substances may be dissolved in a common solvent, such as glacial acetic acid, the two being separately dissolved and the solutions mixed; or the casein is dissolved in the special solvent, which is then added to a solution in any solvent of nitro-cellulose and camphor or other ingredients, with or without dilution with alcohol, etc. The casein and nitro-cellulose may be mixed together before being dissolved, if preferred.

26,686. Photography. HOUGHTON, E. W., and SMITH, E. D., both of 88, High Holborn, London, W.C. December 7.

FIG. 1.



Cameras; enlarging; lenses and lens fittings.—To enable daylight enlarging-cameras to be used with artifical light for enlarging-purposes, a burner *d* is supported by the adjustable bracket c^1 on the hinged baseboard *a*, as shown in the Figure, and the frame *f* carrying a condenser *g*, is fitted with a vertically-sliding board *h*, which forms a support for the front of the camera so as to bring the negative *j* into central illumination from the burner. The back frame *l* may be supported on a stepped block *m* which can be clamped at any position on the baseboard *a*, or by a central bracket which is capable of vertical adjustment.



As anticipated in last month's article the past four weeks have shewn a considerable addition to the number of films offered to exhibitors. The weather bas been more propitious and has given a greater opportunity of putting in more good work than has occurred for a long time. As we write, however, the weather is not above suspicion and it is a difficult matter to make arrangements two or three days beforehand as to the taking of various subjects which have to be staged and for which actors and actresses have to be provided.

THE HEPWORTH MANUFACTURING CO., LTD., has got hold of a good comic film which is admirably worked out, entitled "The Rival Sportsmen." These gentlemen carefully stalk a rabbit and resist the inclination to fire until they are within two feet of the unfortunate animal, when they both blaze away at the same time. Seizing the victim, they dispute as to the ownership and in the struggle the rabbit is torn in half, when they both discover they have been sold by a country yokel who has filled the skin of a defunct coney with straw. The subject is very laughable and well worked out.

THE AUTOSCOPE CO. have been busily engaged and in a very short time we are promised a few films of some unique naval pictures showing the various phases of life on board battleships, torpedo-boat destroyers, etc., also some of the mysteries connected with submarine mining. From what we can gather these should be some of the best marine pictures that have been taken, and as the public is deeply interested in naval warfare, we think the films will meet with a favourable reception.

MR. PAUL, of Holborn, treats three homely subjects in an excellent manner. In "The Fatal Necklace," a little girl begs to be allowed to wear a valuable necklace, and, after some persuasion, mother allows her to go for a walk in it. They are next seen in a lane, where the nurse meets a policeman and forgets the child. A tramp passes, and, noticing the necklace, attempts to take it. A waif, who has been watching, trips up the tramp, who runs after him and the child. The nurse, unable to find the child, goes back

to the mother. As they are leaving to make search the child enters, bringing the waif, and explains what has happened. The mother offers him some money, which he refuses, but she instructs the servants to take care of the boy. In the next view the child is taken to bed, and the tramp breaks into the room. The waif denounces the tramp, who is arrested, and found to have the necklace in his pocket.

In a "Victim of a Misfortune" two painters are at work on a shop-front, when a servant brings tea. The foreman interrupts them, and the girl is about to leave, when a policeman kisses her. The painter is enraged, and, taking a pot of paint, pours it over the policeman's head. The latter, recovering himself, chases the painter round the tressels. One of them, catching hold, precipitates the plank and painter. The view changes to a country road, where the policeman is chasing the painter. Some laundry girls who are passing, put down their basket, and the policeman trips over it. The painter collides with a milkman, and upsets his milk. The laundry girls and milkman join in the chase. They dodge round a lady approaching them, but the painter, getting disentangled and seeing a cab, jumps on the box, throws off the cabman, and drives away. The policeman, with his companions, arrives just in time to see the escape, and the old lady, laundry girls and milkman combine to belabour him unmercifully.

The third is "A Race for Bed." A burglar is stealthily creeping into a bedroom. He forces a chest of drawers, and transfers the contents and valuables to his bag. Suddenly he hears footsteps and crawls under the bed. Two brothers enter the room, and challenge each other as to who will be first in bed. An exciting race ensues, but one of them cannot get his trousers off. After a good deal of pulling he detaches one leg, and eventually finishes his tussle, and, pouncing into bed, tries to turn his brother out. Under the heavy strain the springs give way, and both fall on top of the burglar, who slowly raises up the bed on top of the brothers, and cleverly escapes.

Messrs. Pathe Freres recently showed us a number of their latest films, amongst which we were particularly struck with "The Young Apple Thief." A policeman detects him in the act of robbing an orchard and he escapes chastisement by climbing through a hole in the wall, through which the emissary of the law, who is inclined to stoutness, is unable to pass. Another of their subjects, "The Fairy of the Flowers," is one of the prettiest films we have seen, the colouring effects being perfect. Before leaving this firm's productions, we would also mention that "The King of Dollars" is an exceedingly clever film shewing feats in the art of "Palming." We have not yet seen the film representing a Martyr and the Lions, mentioned in another column. which Pathe's Paris house is busily engaged upon. This subject will no doubt be looked forward to with considerable curiosity, as the fact that a real lion has been engaged is a decided novelty, and if it is worked out in the way the firm generally produces its subjects, it ought to be a good marketable film.

Messrs. Gaumont & Co. have their opertors busy and we notice that one of them, like the bee, has gone where the flowers are blooming, *i.e.*, to the Scilly Isles, and he has procured an interesting and lovely series of the flower industry in these islands which are the principal suppliers to Great Britain. Whilst producing a subject like this, they are also bringing out two or three good short comics, amongst the principal being "The Three Tramps" and "A Motor-Bike Adventure."

There is another recruit to the rank of film producing manufacturers, namely, the Walturdaw Co., Ltd., who are now producing for the first time films of their own taking. "The Handcuff Mystery Solved" is a good film showing the two Cirnocs performing their wonderful feats, and showing how they are done. They also have an operator following the train of General Booth in his tour in the East, and we should say that these films would be admirably adapted for Sunday League entertainments and those exhibitors who go in for sacred subjects.

The Warwick Trading Co., Ltd., have, amongst others, produced two very fine films, one being entitled "A Cinematograph Study of Wild Beasts, Birds and Reptiles." This film is in its way unique, for in no case are there any bars shewn, the animals thus appearing as if at liberty. Excellent pictures are shewn of lions, tigers, elephants, bears, cranes, seals and a chimpanzee and the interest in the whole film is well sustained throughout. We saw another film of this firm entitled "Disappointed." It represents the shopfront of a milliner with a description of the shopowner's trade on the shutters, which are closed. Presently one side of the shutters are thrown open, and the attention of a tramp and several passers-by is attracted to the announcement which appears on the closed half of the shutters, intimating that a most curious action will be taken by the shopowner on "Sunday at 12 a.m." The tramp and other passers-by

take a note in their pocket books of the time and place when this event will occur, and the film then changes to Sunday at twelve o'clock. Instead of the expected performance, however the shutters are thrown open and a pail of water is skilfully distributed over the persons assembled. The film closes with a view of of the people hammering and battering on the shutters to shew that their disappointment has been superceded by rage.

FOURTH PHOTOGRAPHIC EXHIBITION.

PORTMAN ROOMS were certainly changed into a fanciful and bright exhibition during the past month, when the Fourth Photographic Trade and Pictorial Exhibition was held. We were, however, greatly dissatisfied at finding that the Optical Lantern was hardly in evidence at the numerous stalls. Photographic goods, chemicals, plates, papers, films, cameras were there galore, and such firms as Houghtons, Butchers, Benetfink, Lancaster, Zeiss, Lockyer, and most of the leading firms were in evidence at a number of prettily arranged stalls, but the only two who made anything like a display of lantern goods were Messrs. J. Wrench & Sons and Messrs. Gaumont & Co. The former showed their Wrench series of lanterns, their condensors in patent mounts, various lamps, chimneys, objectives, lime holders, and the usual paraphernalia, including the "Beck Multifex" lantern objective. The new objective of Messrs. Wrench, which consisted of a positive and negative lens on the telephoto principle, was of particular interest to lanternists. By altering the distance between these elements, and lengthening or reducing the lens tube of the lantern front, any degree of magnification, within wide limits, was secured without altering the distance of the screen, the definition in each case being all that could be desired. Such a lens will be highly appreciated by the lanternist who is called upon to operate in buildings of various sizes, each requiring a special size of picture, while the positions available for the apparatus are not always well adapted to obtain the desired result with lenses of the usual focal lengths. By its aid, any convenient position of the lantern and screen may be selected without affecting the size or definition of the disc projected.

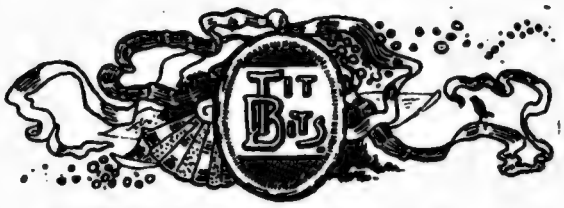
Messrs. Gaumont, besides showing their cinematograph apparatus, the oxygenator, Gwyer jet, and many other of their well-known goods, made a speciality of their miniature camera, the "Block Note," which is a marvel of ingenuity and clever workmanship.

The Animated pictures shown by Mr. J. Hay Taylor, on behalf of Messrs. John Wrench and Son, as well as the kinematographic lantern by which they were projected, which combined smoothness and accuracy of movement with brilliancy and clearness of definition in a very high degree; were amongst the most notable features of the Exhibition. The film which appeared to the writer to be the most deserving of commendation was the one showing a Caravan entering Afghanistan through the Khyber Pass. The deliberation with which the heavily laden camels and their attendants marched over the rugged pathway, the movements of the heads of the animals and their jaws as they masticated their food, gave an impression of reality which it would be difficult to surpass, and reflected great credit upon the skill of the enterprising photographers who successfully performed so difficult a task.

Each day, too, Mr. C. R. Rowe demonstrated Dr. Miethe's method of colored photography, which created a sensation at the St. Louis Exhibition. A selection of slides was projected upon the screen in natural colors by means of the special apparatus designed and manufactured by Mr. P. Goerz. These demonstrations were well attended and added considerably to the success and interest of the exhibition.

Among the list of awards, for lantern slides, were a first prize for a pretty sunlight effect by the Rev. H. W. Dick, called "Time and Sunshine"; Mr. W. H. Goy secured the first bronze plaque for his slide "Daffodils," and Mr. F. E. Roofe obtained the second bronze plaque for "Sunshine and Shadow."

Taken as a whole the Exhibition was a success, and our only regret is t the lantern did not hold so conspicuous place as we could have wished, and as deserves,



"Camera Notes" Discontinued.—We much regret to learn that this bright little monthly is not to be issued again. With its last issue, April, it had reached Vol. II., No. 24. The reason of its sudden stop is not yet known to us.

Bioscope Exploration.—In view of the expected trouble in the Western Caucasus, Mr. Charles Urban is sending out a bioscope expedition to that little known land, with the object of securing a complete pictorial history of the coming events in the country.

The Crews of the Oxford and Cambridge Boatrace were present at the evening performance at the Alhambra, when much enthusiasm was displayed during the cinematograph exhibition, which included representations of the Boatrace, the Match at the Crystal Palace, and the Grand National.

Motion Pictures without a Cinematograph.—Under the auspices of the National Science and Microscopical Society of Bury, Mr. F. Enock, F.E.S., F.R.H.S., delivered a lecture entitled "Insect marvels in a town and garden." Many of the slides were constructed to show the actual movements of the insects upon the screen.

The Popularity of the Lantern.—Remarkable success has accompanied the series of lantern lectures conducted during the season at Hastings by Mr. J. J. Butler. It is estimated that during the thirteen Thursday evening entertainments, and the eight Sunday services, no fewer than from 8,500 to 9,000, persons have attended the meetings.

Lantern Slides for the Anglo-Jewish Association.—At the last meeting of this Association, the Committee recommended that lantern slides be prepared illustrating the work of the Association in the East, and that these, together with a short descriptive paper, be lent to the provincial branches and London gatherings, for the purpose of bringing the work of the Association before the public.

The Emigrants sent off to Canada by the *Daily Telegraph*, from West Ham, had the opportunity of making the acquaintance of the country they were making their new home, for a series of lantern pictures showing many of the important features and work in Canada were shown on the occasion of a tea and entertainment given at the Great Assembly Hall, Mile End Road.

Quick Work.—A film illustrating the complete race for the Grand National was shown at the Coliseum on the night of the race. The photographs were taken during the race, and the film was made on the train during the journey from Liverpool to London. The Stock Exchange Point-to-Point races, run at Ring, were realistically illustrated on the Bioscope, at the Palace Theatre, the same evening.

Pictures to Win Votes.—Mr. W. E. Horne, the Unionist candidate for Barnstaple, is using the cinematograph to convince the electors of the effects of the Liberal policy in allowing Alien immigration into England. The contrast between the films of aliens arriving in East London and English workmen leaving Liverpool to seek work overseas needed few words to enforce their truths. The pictures have attracted big crowds to the meetings.

Cinematographs on Sundays.—At a recent meeting of the London County Council, the Theatres Committee recommended that in future the prohibition against opening on Sundays contained in the Council's licences for music, dancing, or stage plays be strictly enforced so far as related to the giving of cinematograph exhibitions. The Committee thought the practice might be attended with danger from fire, and did not care to undertake Sunday inspection of places of entertainment where it could be avoided. On the understanding, however, that a deputation of persons interested was anxious to wait upon the Committee, the Report was adjourned.

The United Stereoscopic Society report:—"Stereoscopic Negative Cutting and Transposing," by Messrs. J. Cole and T. Lambert, of Burnley, is being demonstrated in this month's set of the United Stereoscopic Society. This society is still forging ahead, and now unites the friendship of members in the British Isles, the Colonies, and the Continent. Last month the following were nominated to act on behalf of the Society:— Committee—E. Turner (Bury, Lancs.), J. Cole (Burnley), J. C. Dancer (Manchester), W. Pugsley (Ilfracombe). Stereo workers interested should write to the Secretary, A. J. Snow, 84, St. Andrew's Road, Walthamstow, for particulars.

A Cinematograph "Martyr." — Messrs. Pathé Frères' latest cinematograph subject has taken the form of "A Roman Holiday." The building belonging to the firm and situated not far from Paris was, for this purpose, converted into a very good imitation of an arena. During the taking of the first part of the film, the Christian Martyr was impersonated by a living man; then the machine was stopped till a dummy, partly composed of horse flesh, was substituted for the living being. At this point lions were let into the arena, which quickly devoured the meat, which, to all intents and purposes, served as the dying martyr torn to pieces by the beasts.

"A Talk about Camera Pictures."—Under the auspices of the Aberdeen Working Men's Natural History and Scientific Society, Mr. G. L. Smith, teacher of photography at Robert Gordon's College, Aberdeen, delivered a lecture on the above subject. Mr. Smith stated that several of the slides which would be shown by means of limelight lantern were the work of his pupils. He also pointed out the special points in several of the pictures which increased their artistic value, and made them of special interest from the point of view of good photography. The pictures thrown on the screen by the lantern included a large number of local interest, such as public buildings, fishing boats at the harbour entrance, the Winter Garden in Duthie Park, Donside and Deeside views, Rubislaw Den, Aboyne Castle, scenes in the Braemar Highlands, and at Hazelhead, Stonehaven, etc. Specially admired and applauded were a number of pictures of evening effects and flowers studies.

A Model Studio.—In a recent *Pharmaceutical Journal* appeared an interesting description of the studio of Mr. J. Williamson, of Brighton:—The studio is built almost entirely of glass, and is situated close to the railway (which probably facilitates the procuration of railway effects for some of his subjects). Inside the studio one could easily imagine oneself on the stage of a theatre, what with drop scenes, wings, and numerous "properties." This studio has been the scene of many a tragedy, many a drama, and many a comedy, which have all been reproduced with life-like fidelity and shown all over the country. The works where the developing, printing, etc., are done are situate a short distance from the studio, and this also is supplied with every up-to-date appliance and apparatus whereby the best results are to be obtained.

Russo-Japanese War Pictures.—A private exhibition was given last week at the Japanese Legation, in the presence of Viscount Hayashi and members of the Legation. It was given in fulfilment of a condition imposed by the Japanese military authorities that the pictures were not to be public until they had been submitted to the Japanese Minister. The following were among the principal pictures: General Oshama at counsel with officers; troops building defences with sacks containing army provisions; troops marching over hills within three miles of Port Arthur; field-gun in action during the attack on 203 Mètre Hill; the 11 in. Howitzer siege guns pouring 500lb. shells into Port Arthur; blowing up the West Erh-lung-shan Fort on December 30, 1904; West Erh-lung-shan Fort after the capture, showing entrances to underground shelters used by the Russian garrison; Russian prisoners found entombed in Erh-lung-shan Fort; panorama of Port Arthur new town during investment of Japanese troops; entry into Port Arthur of the Japanese army; and General Nogi, Staff, and foreign military Attachés.

Catalogues and Books Received.

The Pathe Cinematograph Co., Ltd.—Send us a copy of their 1905 Illustrated film catalogue, in which we find a wealth of subjects all of which may be termed staged. The catalogue is really made up of the supplementary lists, this firm has issued during the past twelve months; and should in this more convenient form be held by every exhibitor.

Novelties for Professional Photographers. We have received particulars of Elliott and Son's Novelties for the Spring and Summer Trade; consisting of The Greuse bromide Water-colour; The Brunette toned bromide; The Marquise Carbon Water-colour; and The Velvetone bromide. Messrs. Elliott and Sons make a speciality of preparing specimen enlargements in these various styles for the profession.

Wellcome's Photographic Exposure Record and Diary.—A copy of this useful pocket book is to hand. On the inside of the back cover is attached an exposure calculator. Correct exposure is the essence of success in photography. Formerly its estimation was left entirely to the judgment of the photographer, and success could only be achieved after much experience and disappointing failures. The system now advocated depends upon the use of the simple instrument called "Wellcome's Exposure Calculator," which is furnished with each copy of their Exposure Record and Diary.

Morley & Cooper's Catalogue.—A neat catalogue of 115 pages, comes to hand from Messrs. Morley and Cooper, 271, Upper Street, Islington. In connection with their Lantern Department they are now supplying refined and high-class entertainments, all arrangements receiving Mr. Cooper's personal attention.

"Camera House Journal," issued by Messrs. W. Butcher & Sons, is to hand. This month it contains a new brand of Pyro-Soda Developer, Gold Toning and Fixing Bath, and the Redeveloping Intensifier, all of which are to be knwon as the "Kangaroo" preparations. The last named should be useful to amateurs. The uncertainty of Uranium Intensifier is well known unless it is always made up quite fresh, and the Mercurial one is not suitable to be handled indiscriminately, and cannot, being a poison, be sold except by qualified chemists. This is a two-solution Intensifier. The No. 1 solution "bleaches" the negative until only a faint image remains on the plate, when it appears yellow; at which stage it is thoroughly washed and then immersed in solution No. 2, when redevelopment takes place. From the specimen shown, we should judge that it would prove a popular preparation.

Another Trade Journal, known as *Fallowfield's Courier*, has reached No. 13, Vol. 2. This month Mr. Fallowfield is bringing to the notice of dealers the "Taquta" Camera. The camera measures 3 × 3½ × 1½ ins. It is made of polished German silver. No doubt this camera will be largely in demand for sea-side portraiture. The *Courier* also contains a description, with illustration, of the "Xtralight" Electric Dark Room Lamp, which is supplied with connections, so that it will fit the ordinary lamp holders used in the usual house installation.

The Chas. Urban Trading Co., Ltd., of 48, Rupert Street, are issuing a handy little notebook and diary, for the use of bioscope exhibitors. It is bound in red morocco, with gilt lettering and contains a lot of information useful to exhibitors. It is of the double folding type of pocket book, one part containing the diary, and the other a tabulated notebook. An accident policy for £1,000 is presented with each copy and it will be sent free to applicants who are exhibitors.

Exchanging Stereoscopic Prints.—A gentleman in New York wishes to be put in touch with English and Continental stereoscopists, with a view to exchanging toned and unmounted prints. Names and addresses of those desirous of exchanging, should be sent in the first instance to the Editor, 34A, Castle Street, Salisbury. It should be noted however that on and after May 15th, the Editor's address will be "Westcot," Drummond Road, Boscombe.

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Miscellaneous Advertisements.

Professional Announcements.

LECTURERS requiring a few good slides (rather than rubbish in quantity), should try Wilkinson, 15, Holmeside, Sunderland. Established 1859. Wet plate Collodion Transparencies from owner's negatives, and best colouring.

Trade Announcements.

EXCEPTIONAL Bargains to immediate purchaser. Gaumont's "Chrono" Living Picture Camera Outfit, with all accessories. No reasonable cash offers refused. In addition to the complete outfit as sold by the makers, I have also 2 extra Magazines for the above camera, each carrying 300 ft. of film. A Special Street Tripod, polished ash, triangular head. Sundry other extras; full particulars, with specimen of film taken, will be sent on receipt of stamped addressed envelope. One-third list prices considered. All apparatus guaranteed in perfect order; the camera has been used only a few times.—Apply to T. BROWN, Thelma, Castle Road, Salisbury.

35 Copies of "Stereoscopic Phenomena of Light and Sight" to be disposed of at half published price, on account of covers being slightly soiled. This Book has received the highest recommendation from the Photographic Press and public, and contains a wealth of illustrations and information on Stereoscopic Photography. Usual price 3/6, price of slightly soiled copies 1/9, post free. Only the above number can be sold at this price.—From the MANAGER, the Stereoscopic Supply Stores, 34a, Castle Street, Salisbury.

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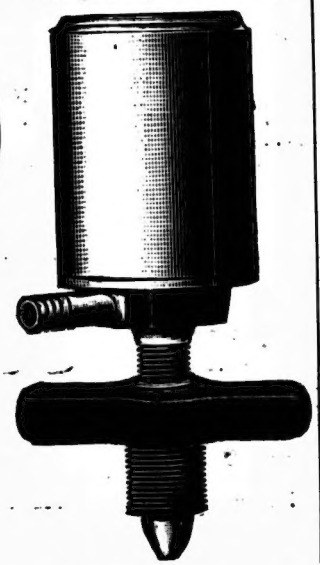

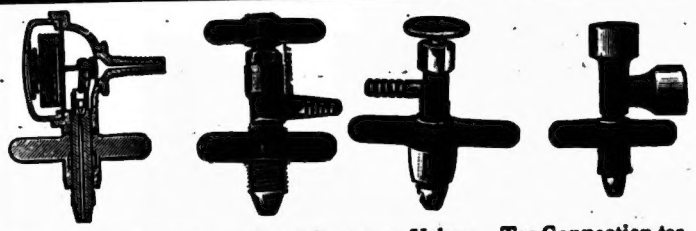

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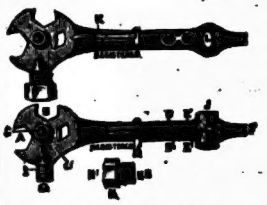

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Our clients are most enthusiastic in their praise of this novel and splendid film.

Length 400 ft. Price £10.

Burglars arrive and obtain entrance by jumping up to Upper Window. Police arrive and obtain a Ladder which they slide up. Police and Burglars rolling up the roof. Climbing down the house side head first. Holding up a Cab. Horse and Cab travel backwards. Ditto Police. Horse vanishes. Burglars make a dash up a flight of steps. Police slide up the Railings Chase over a stream. Burglars turn somersaults in jumping over backwards way. Over a gate backwards. Desperate struggle in which Burglars disappear only to appear further on theroad. The film is brought to a finish by the Capture of the Burglars after a desperate struggle in which one Burglar endeavours to strangle his pursuer.

5 per cent. Discount, Cash with Order. Code Word, "Eccentric." Quality Excellent. Natural Scenery.

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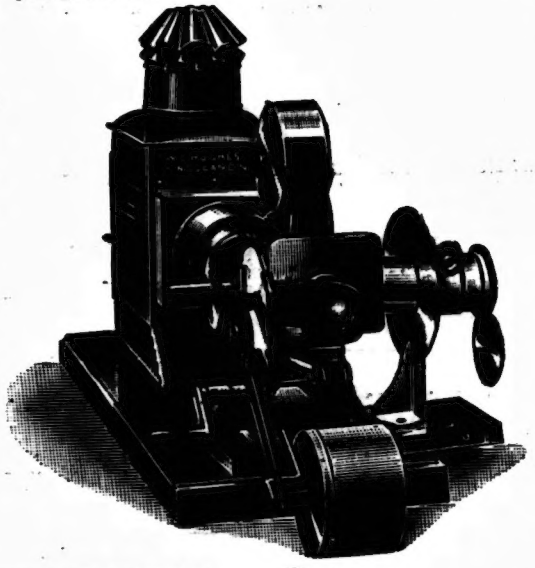

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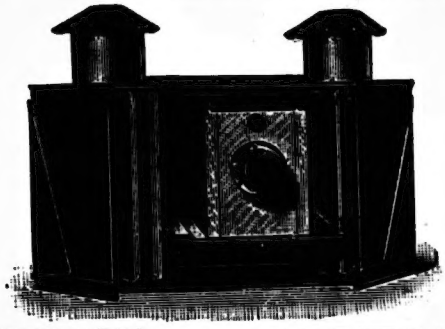

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Printed and Published for the Proprietors, by E. T. Heron & Co., 9 & 11, Tottenham Street, Tottenham Court Road London, W. May, 1905.